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SOME OBSERVATIONS MADE DURING THE TREATMENT OF CHRONIC CATARRHAL DEAFNESS.

Read in the Section on Laryngology and Otology, at the Forty-seventh Annual Meeting of the American Medical Association, at Atlanta, Ga., May 5-8, 1896.

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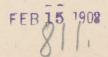
BY THOS. H. SHASTID, A.B., M.D.

The treatment of chronic catarrhal deafness may be considered under three heads: Treatment of the ear directly, attention to the throat and nose, attention to

conditions of the body in general.

As regards treatment of the ear directly. I wish to speak only of intra-tympanic operations. As a way out of the confusion that seems to exist regarding the propriety of the application of these procedures. I have divided them for the purposes of my own practice into two well-defined classes. Into the first of these I have placed such procedures as, while of doubtful utility to the hearing, are of some, though slight, danger to life. These are the operations for the removal of one or more of the ossicles with or without part or all of the drum membrane, and mobilization of the stapes. These procedures, as much recorded (and perhaps much more unrecorded) experience goes to show, are often followed, even when performed under strict antiseptic precautions, by severe suppuration; and, as they do not very often produce a really valuable increase in the hearing power. I do not think that even total deafness can justify their employment. The second of the classes into which I divide intra-tympanic operations consists of single and multiple incision of the drum membrane. partial myringectomy, plicotomy, traction on the handle of the malleus, tenotomy of the tensor tympani. These operations are often productive of much good, seldom, if ever, of harm, and are moreover when RY.

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properly performed, entirely unattended with danger. Such procedures, even though by no means uniformly beneficial, are proper in cases in which they are not positively contraindicated and in which inflation and massage and treatment of the nose, throat and general

system have not proved beneficial.

I report a case that possesses considerable interest from its bearing on the topic of intra-tympanic operations. A lady, aged 30, had been deaf from catarrh for several years. Inflation and massage and treatment of nose and throat conditions had produced no benefit. I. therefore, applied Luce's sound. The immediate result was gratifying. The hearing for both accumeter and voice rose to nearly treble its former power. Within twenty-four hours, however, the patient returned as deaf as before. Again I applied the sound; again the result was brilliant; again the patient returned no better than before. Then I did a tenotomy of the tensor tympani, but without effect. At the end of twenty-four hours the patient returned and requested me to apply the sound again. This I did, with good result; but this time, and this is the point that is particularly worthy of note, the improvement was of comparatively long duration, lasting nearly three months. Encouraged by the measure of success in this case. I tenotomized the tensor in three other cases in which the pressure sound was productive of good but temporary results, but, so far as I could tell, without any effect whatever on the duration of the improvement. These four cases, taken together. impressed upon me the fact that the mechanical problem in cases of chronic catarrhal deafness, so far from being anything resembling a constant one, is of almost infinite variation, and that it is impossible to tell with certainty in advance whether a given operation will prove of benefit, but that in all cases of great severity and unamenable to other treatment, every intra-tympanic operation should be tried which offers a reasonable hope and which does not endanger either hearing or life.

While speaking of intra-tympanic operations, I desire to call attention to an improvement in the shaft and handle of instruments intended for such operations, which, though it was described in the "Archives of Otology" some three or four years ago, has not, I believe, received the general adoption it deserves. I refer to the shaft and handle of Dr. Barclay. In instruments mounted according to Dr. Barclay's idea the handle is joined to the operating shaft by a lateral shaft in such manner that the axis of the handle, prolonged forward, intersects the axis of the operating shaft exactly at the operative extremity. I have had several instruments mounted in this manner, and find that it gives a precision and lightness of touch unattainable by any other means. I believe that Dr. Barclay's idea constitutes a real progress in otology.

Apropos of the effect upon the hearing of nasal and pharvngeal treatment, I urge the importance to the hearing, of vibration or massage of the nasal and pharvngeal mucous membranes when these structures are the seat of atrophy. The loss of hearing accompanying this throat and nose condition is not invariably slight, though it is usually asserted to be so, being in some cases great enough to interfere seriously with ordinary conversation. I believe that in these cases massage of the nose and throat mucous membrane, if persisted in for some time, will result in relieving a large proportion of them of a measure of their embarrassment. Such has been my experience, and I think that I have exercised reasonable care in the exclusion of other possible causes for the improvement. The only instrument that I have used has been Dr. Freudenthal's vibrator. I have seldom seen any improvement until the massage has been continued for a long time.

Under the head of attention to conditions of the body in general, I report a case in which the hearing was very powerfully affected by belladonna. A patient whom I was treating for chronic catarrhal deafness would, at irregular intervals, suffer a very consider-

able aggravation of his trouble. This would in a few days quite, or nearly, disappear, only to return in a few days more. The exacerbations were not accompanied by symptoms of cold, but by unusual dryness of the mucous membrane of the throat and nose. On inquiry I found that the patient was occasionally taking a purgative pill which contained, among other ingredients, a quarter of a grain of the extract of belladonna. Naturally associating the belladonna with the dryness, I directed the patient to observe whether or not his periods of increased deafness followed the use of the pill. He reported that they really followed its use. Then, in order to eliminate as possible sources of error the influence of suggestion and also of the various drugs which the pill contained other than the belladonna. I ordered a discontinuance of the pill and then each time the patient came to me I administered to him a tablet, sometimes a blank one, sometimes one containing a quarter of a grain of the extract of belladonna. Each time the tablet containing the belladonna was administered the patient suffered this aggravation, but at no time did he experience an increase in deafness after the administration of the blank tablet. It would seem that the deafening effect of the drug was exerted chiefly upon the middle ear; for the patient's ordinarily somewhat increased cranial perception was still further increased whenever he took the belladonna. I thought the increased difficulty in hearing arose from impairment of sound conduction due to inspissation of secretion among the tympanic folds and the ossicles.

